DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-028596 Address: 333 Burma Road **Date Inspected:** 15-Oct-2012

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1730 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: Salvador Merino and Steve JenserCWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: SAS OBG**

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower elevation 123 meter, this QA randomly observed ABF/JV qualified welder Richard Garcia continuing to perform 2G (horizontal) position Partial Joint Penetration (PJP) welding 6mm bent plate butt joint per Request for Information ABF-RFI-002642R01 dated December 6, 2011. The RFI pertains to the modification of the Tower Lift 4 Façade Seal Elevator interference. The welder was noted implementing the Option #3 and detail #3 of the RFI's attachment.

During welding, the welder was observed manually welding in 2G (horizontal) position utilizing self-shielded Flux Cored Arc Welding (FCAW-S) with 0.035" diameter E71T-11 wire electrode implementing Caltrans approved welding procedure ABF-WPS-D11-2044. ABF QC Barry Drake was noted on site monitoring the welder and his welding parameters with measured working current of 80 amperes and 16 volts. At the end of the shift, two bent plates modification were done at north and west shafts of the Tower at elevation 123 meter. The remaining modification of the same bent plates at higher elevation will continue tomorrow.

At OBG 2W-PP-13.5-W2-N deck access hole inside, QA randomly observed ABF/JV qualified welder Jin Quan Huang perform CJP groove welding repair. The welder was observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1001-Repairs. The repair excavation was preheated to more than 150 degree Fahrenheit

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

using propane gas torch prior welding. During the shift, ABF QC Salvador Merino was noted monitoring the welder. Prior welding, ABF QC Salvador Merino was also observed performing Magnetic Particle Testing (MT) on the repair excavations prior welding repair. There were no significant defects noted during the test. The following first time repairs were noted excavated and welded during the shift;

Y-location Length Width Depth Remarks

- 1. 350mm 70mm 22mm 9mm R1 – completed.
- 2. 3715mm 90mm 28mm 12mm R1 – completed.
- 3. 2755mm 110mm 32mm 12mm R1 completed.

FW Spencer:

At Tower location elevation 50.3 meter, this QA randomly observed FW Spencer qualified welder Damian Llanos continuing to perform Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding fill pass to cover pass on the 2" domestic utility water line field splice butt joint. The welder was noted welding the root pass with 3/32" E6010 followed by fill and cover pass with 3/32" diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC Steve Jensen was noted monitoring the parameters of the welder. At the end of the shift, only one 2" diameter pipe splice butt joint #8 located at panel point PP42 Tower elevation 53 meter was completed.





Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:

Lizardo, Joselito

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: QA Reviewer Reyes, Danny